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(54) Title: NUCLEIC ACID COMPRISING OR CODING FOR A HISTONE STEM-LOOP AND A POLY(A) SEQUENCE OR A POLYADENYLATION SIGNAL FOR INCREASING THE EXPRESSION OF AN ENCODED THERAPEUTIC PROTEIN

(57) Abstract: The present invention relates to a nucleic acid sequence, comprising or coding for a coding region, encoding at least one peptide or protein comprising a therapeutic protein or a fragment, variant or derivative thereof, at least one histone stem-loop and a poly(A) sequence or a polyadenylation signal. Furthermore the present invention provides the use of the nucleic acid for increasing the expression of said encoded peptide or protein, particularly for the use in gene therapy. It also discloses its use for the preparation of a pharmaceutical composition, e.g. for use in gene therapy, particularly in the treatment of diseases which are in need of a treatment with a therapeutic peptide or protein, preferably as defined herein. The present invention further describes a method for increasing the expression of a peptide or protein comprising a therapeutic protein or a fragment, variant or derivative thereof, using the nucleic acid comprising or coding for a histone stem-loop and a poly(A) sequence or a polyadenylation signal.



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